

FILMSTRIP MANUAL

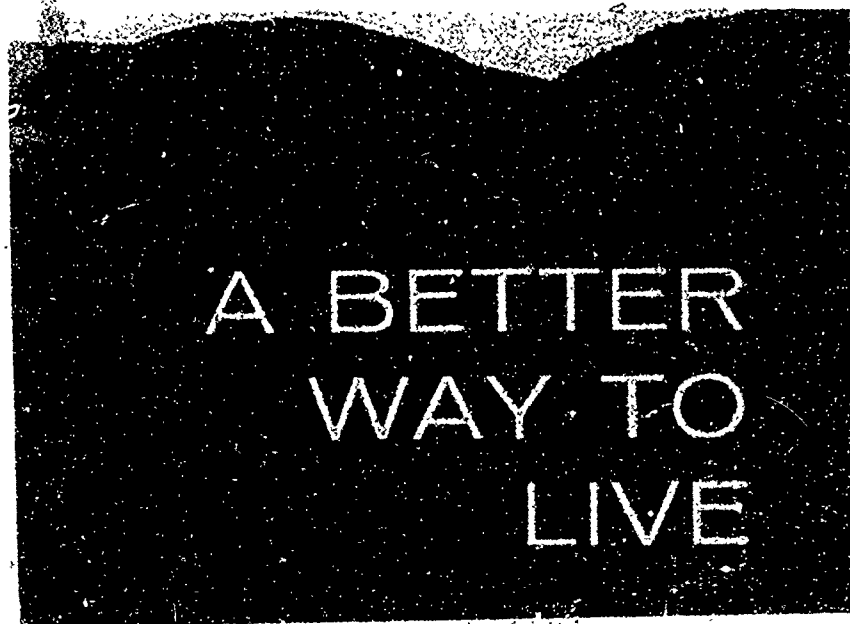
to

Accompany

the

Filmstrip:

A BETTER WAY TO LIVE



THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
BUREAU OF CONTINUING EDUCATION CURRICULUM DEVELOPMENT
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ABSTRACT

This filmstrip manual is provided as a guide to the filmstrip "A Better Way to Live." It is intended to suggest ways to use the filmstrip to greatest advantage. There are general comments about using this filmstrip or any filmstrip, questions for class discussion, and the complete script and description of the action of the filmstrip. The manual contains five sections. The first section, Introduction, is a discussion of the philosophy of American life which causes citizens to question: "Is there a better way of life?" The second section discusses such points as planning, preparing equipment, orienting the class, evaluating, and follow-up. The third section examines the use of specific areas of interest covered in the filmstrip and includes procedures, examples, and suggestions. The fourth section presents discussion questions which could be used during the filmstrip. The final section is a narrative of the filmstrip accompanied by photos of the slides. A preface and foreword are also included. (TK)

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A BETTER WAY TO LIVE

A Filmstrip Manual for

Environmental Education



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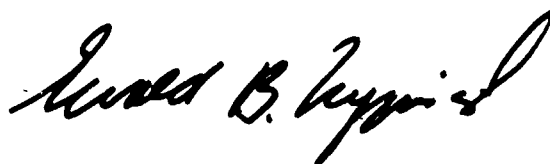
PREFACE

It has been encouraging to observe that the public has not lost interest in the environment, contrary to the gloomy predictions of a few years ago. The alarmists and doomsayers have largely given way to the agents of constructive optimism and purposeful change. People in all areas of work and endeavor are including environmental considerations in their day-by-day concerns. Building projects, bond issues, energy requirement assessments, automobile specifications, and the like rarely escape public scrutiny in terms of environmental impact. Legislators have been stimulated, if not forced, by their constituents to exhibit an environmental conscience.

Yet, this cause is something which is relatively easy for individuals to espouse because the object of their admonishments remains that large, impersonal, distant group of offenders which often include the construction industries, the utilities companies, and government. The commitment which is still unfulfilled is the more personal, introspective one. The relationship between automobile production, roadbuilding, and energy requirements on the one hand and personal habits, choices, and attitudes on the other is less often established by individuals. And frequently, these are the same individuals who help prepare the brief for the larger dimensions of the environmental crusade.

Education, with its concern for the individual, his behavior and attitudes, and his responsibility to others and society in general, must continue to define its role pertaining to the environment. The products and by-products of this definition process must then become the tools with which education transforms the student into the agent of constructive optimism and purposeful change. Thus will the environment and human society be served.

The filmstrip, *A Better Way To Live*, and this supplemental manual are intended to suggest to educators, and the students with whom they learn, some of the questions we have yet to consider, and a few practical ways of becoming familiar with the realities they represent. I urge you to continue to apply your energies to this extremely important aspect of the educational process.



EWALD B. NYQUIST
President of the
UNIVERSITY OF THE STATE OF NEW YORK
and
COMMISSIONER OF EDUCATION

FOREWORD

This filmstrip manual is provided as a guide to the filmstrip, *A Better Way To Live*. It is intended to suggest ways to use the filmstrip to greatest advantage. There are general comments about using this filmstrip or any filmstrip, questions for class discussion, and the complete script and description of the action of the filmstrip. In addition, the manual devotes considerable attention to the strategy of lesson plan development based upon a single concept as represented by an individual photograph from the filmstrip. Thus, as a supplement to regular use of the filmstrip, in which the overriding theme or message is attended to, this strategy permits concentration upon one or a few ideas which might be of particular interest or importance. Also, the example provided in this manual should encourage teachers and students to use selected photographs of their own making as visual foci for lesson plan development.

The Bureau of Continuing Education Curriculum Development expresses gratitude to Joan Rosner, School District 30, Queens, for providing the Introduction, or rationale, for this manual, and for developing the sample lesson plan and discussion questions presented herein. Appreciation is also expressed to Oscar A. Kaufman who developed the script and was responsible for the technical production of the filmstrip. The original cover design by Mr. Kaufman warrants special acknowledgement.

Project coordination and preparation of the manuscript for publication was the responsibility of Barry W. Jamason, Coordinator of Environmental Education, and associate, Bureau of Continuing Education Curriculum Development.

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INTRODUCTION

The decade of the seventies will be one of searching questions and agonizing decisions. No era has ever been without its problems. But, always before in America's history, people have had seemingly immutable beliefs and institutions to cling to during periods of stress and upheaval. Confidence in the "American way" has seldom been shaken. As a people, we have worked unhesitatingly toward progress and growth. The pioneer mystique of plenty, of unlimited resources, of take what you need and then move on, has served to keep us on a steady course of expansion, secure in the belief that we are fulfilling our destiny.

We have directed our efforts toward efficiency, speed, convenience, and success. Division of labor gets it done fast "... bigger is better... the old is dead... long live the new. If it is new... it is good... if you don't like it any longer... get rid of it, there is plenty more where it came from. Guided by such clichés and platitudes, we have rushed heedlessly toward our goal of a higher standard of living and "more." The paradox is that we may soon reach a point where more can mean less; where less can mean more.

Perhaps we have reached that point now. Perhaps in this decade we will stop asking how to build a better whatever, and will question whether we should build one at all. The defeat of the SST is a striking example of an incipient doubt surfacing in the national consciousness. For the first time, we asked ourselves whether being the first to get there faster was worth all of the negatives inherent in the achievement.

America, as a nation, is doing now what many individuals do at some stage of their lives, taking stock and asking: Is it worth it? After devoting a lifetime to amassing wealth and the things it can buy, many wonder what they really have. Health is eroding. Wives and children are alienated because all human relations, and relaxed enjoyment of life, have been pushed aside in frantic pursuit of success. Large segments of savings are spent on repairing damage done to health and spirits by the exponentially accelerating drive for more... More... MORE.

Now, like the middle-aged man, we feel the world and time closing in on us. Our national health is eroding. Spirits are sagging. People are alienated. We are running faster, and losing ground. In spite of our blinders, we can sense that something is wrong. And, deep within ourselves, we formulate the question: "Is this what we really want, or is there a better way of life?"

The seventies will be the decade for our society to make that decision.

USING THE FILMSTRIP

A major advantage of a filmstrip is its flexibility. It may be shown in part* or in whole, with varying speeds, or in conjunction with other teaching media. While no particular amount of time is recommended for using a filmstrip, it is suggested that a variety of learning activities be used and that the instructor not devote an entire class session to a filmstrip.

The filmstrip also serves to motivate students since they are quick to respond to familiar scenes and attractive pictures in color. It is important to take advantage of the living experience each student has already had. Therefore, much can be learned from each other. It is with the idea of getting people totally involved and bringing out the maximum contribution that each can make that these suggestions are made. A filmstrip lends itself well to asking interesting questions of the class to bring about a high level of involvement.

The following material may be used by the instructor as he prepares an overall plan for the use of a filmstrip. The ideas presented here should allow for comprehensive coverage of content and efficient use of class time. The steps to consider when planning the use of a filmstrip are:

- Plan the Presentation (Organization and Methods)
- Prepare Equipment and Materials
- Orient the Class (Background Material)
- Present the Lesson
- Summarize Concepts and Understandings
- Evaluate Knowledge Acquired
- Followup with Additional Opportunities to Learn

1. Plan the Presentation (Organization and Methods)

Always preview a filmstrip to familiarize yourself with its content. While previewing the filmstrip, prepare comments which might answer such questions as:

- What is the filmstrip illustrating?
- Why is the material presented important?
- What are the important terms and understandings used in the filmstrip?
- What are some appropriate topics which could be used to stimulate class discussions?

2. Prepare the Equipment and Materials

Before the class begins, practice inserting the filmstrip, framing and focusing several times so that you feel comfortable using the equipment. Each frame should be flipped sharply to avoid the distraction of rolling. Have a screen ready. Although the wall may be used, a beaded screen is much more desirable. The larger the room and the larger the group of viewers, the larger the picture needed. Be sure there is a table for the projector, an electrical outlet, an extension cord (the cord with the projector is usually short), and a spare projector lamp. If the class is not held at night, be sure the room can be darkened. Check to see if the lights can be turned off

without cutting off power to the projector. Note: After the class period is over, rewind the filmstrip with the "END" frame inside the roll.

3. Orient the Class (Background Material)

Introduce the filmstrip with some remarks about what the class will see. Discuss the more important terms used in the filmstrip, and point out the main theme(s) to be presented.

4. Present the Lesson

Set the projector up, insert the filmstrip, and focus the first frame you plan to use. The filmstrip may be used wholly or in part,* insofar as it is appropriate to the plans for the lesson. It may also be stopped at any frame for discussion or questions and then continued or turned back. Present your comments and encourage discussion and questions for the students.

5. Summarize Concepts and Understandings

Itemize the important learnings on the chalkboard as they are contributed by the class. Allow time for the students to raise other questions which may lead to a more complete understanding. Encourage students to keep some kind of notations for future review. .

6. Evaluate Knowledge Acquired

Prepare a list of questions which might assist students to evaluate how well they have learned the important points of a lesson. One approach might be for the teacher to present the questions, pause for a few moments to allow the students to form their answers, and then give the answer. The class might be asked to write the answer. Interest could be encouraged by asking the students to keep track of the number of correct answers.

7. Followup with Additional Opportunities To Learn

Introduce a few new topics for discussion which will motivate the students to project their understandings.

*Be sure to consider the strategy presented on the next page which suggests selective concept development in separate lesson plans using only a part of the filmstrip (usually one frame) at any given time.

THE SINGLE CONCEPT LESSON

• INTRODUCTION

In addition to using the filmstrip in the conventional manner described on the preceding pages, it would be worthwhile to consider the possibilities of dealing with some of the concepts individually. Some of the specific points or areas of interest covered in the filmstrip frequently will lend themselves to separate treatment and the material below suggests what might be an efficacious approach.

• PROCEDURE

Select the frame of the filmstrip which has stimulated particular interest.

EXAMPLE: Frame #41 - Supermarket, Dairy Products

Write on the chalkboard or reproduce for student use the script text which matches the selected frame.

EXAMPLE: "And the returnable deposit bottle has become a thing of the past... replaced by plastics, paper, throwaway bottles and cans... all of which are accumulated in large numbers in the garbage dumps of our land and at the bottom of the oceans."

Use activities and discussion questions which you (or you and the students) have developed to exploit and reinforce the concept(s) represented in the selected frame.

EXAMPLES:

1. Ask several class members to bring in shopping bags filled with samples of common supermarket products. Analyze the way each is packaged. Complete the chart below:

Item	Description of packaging	Possible reasons for this packaging	Criticism of packaging	Substitutes?
		(Answers might include:) -keeps food clean -keeps food fresh -discourages shoplifting -is more convenient	(Answers might include:) -overpackaging -nonbiodegradable material -packaging is for eye appeal rather than for functional reason	

In some places, it is difficult to locate stores which sell soda in returnable bottles, and it is often almost impossible to find a store willing to redeem the bottles. Whatever your experience, can you compare it with another community?

5. Have the students investigate to see if there are any places in the community where nonreturnable bottles or cans can be taken for recycling. If there are, have the class organize a campaign among friends to support the efforts of the recycling center. If there is no center, find out if there ever was one. If there was, why is it no longer open?

The class might want to try to cooperate with a civic club, church, or other organization to start a recycling movement in the community. A student might write to the Reynolds Aluminum Company or a bottling company for assistance in getting started. (Send to Public Affairs Department

Glass Container Manufacturers Institute, Inc.
• 330 Madison Ave.
New York, N.Y. 10017

for guidelines and background information on glass recycling.)

6. Borrow a sound film on the solid waste problem from a local or state environmental agency.
7. Invite a speaker from the sanitation department to talk to the class about waste disposal problems faced by the local community.
8. Prepare a class exhibit of crafts projects made from packaging materials. (Necklaces can be made from flip-tops of soda cans; the cans make attractive vases or pencil holders; meat trays can be used as backing for collages of natural objects; the plastic "six-pack" holders can be used to make shopping bags; plastic berry boxes can be melted down and made into jewelry which resembles jade.) Conduct a competition for original ideas.

It should be stressed that this type of reuse of packaging materials will not do anything to solve the solid waste problem. However, it does serve to dramatize the extraordinary amount of useful material which is wasted daily.

• SUMMARY

This approach need not be limited to individual photographs which are part of the filmstrip. Frequently, you or your students will have slides or photos which are appropriate to the interest which has been expressed, or a slide of something which is pertinent may be taken after the interest has been described. In either case, you or a student can then devise a descriptive statement which pinpoints the object of the photo and then develop related activities. Enterprising classes might find that their interest in numerous related environmental topics will culminate in a "home-made" filmstrip or at least an organized, purposeful slide series.

SUGGESTED DISCUSSION QUESTIONS

The following questions may be used during the presentation of the filmstrip or after it has been shown in order to promote further understanding. It is suggested that the instructor seat the class in a circular fashion or in a manner that avoids a rigid row-order arrangement of seats. This will permit more informal discussion. Avoid asking questions which require only a "yes" or "no" answer. Limit judiciously your own participation. Always strive for discussion among as many of the students as possible.

1. What do "happiness" and a "good life" mean to you?
2. Are we Americans, as a people, happy?
Included in this discussion should be the differentiation between pursuit of pleasure and happiness as a state of mind. The discussion should acknowledge the tensions, frustrations, and alienations which are concomitants of modern civilization.
3. Are we better off than our parents were?
Is it important that we are? What do we have that they did not have? What did they have that we do not have? With what problems did they have to cope? With what problems do we cope? Do we envy any aspects of the life they had?
4. If we continue as a society to "progress" as we have, will our children, in their time, be better off than we are now?
With what new conveniences will technology provide us? Is man becoming adapted to the new lifestyle, and better able to cope with the negative aspects of it? Are there, as has been suggested by some environmentalists, "limits to growth?"
5. In what ways would you like to see your lifestyle improved?
6. What changes in our way of life have resulted from our higher standard of living?
Discussion here might include increased leisure time resulting from time-saving convenience products; the need to be reeducated to utilize leisure time most satisfactorily; our increased dependence on mechanized gadgets; our decreased willingness or ability to do things without the input of forms of energy other than human energy; and changes in individual, family, and community living patterns.
7. What are some of the ways in which the environment has deteriorated?
Discussion should go beyond the obvious physical forms of deterioration such as air, water, and noise pollution and solid waste disposal problems. It should include human deterioration, poverty, crime, and other factors.

8. What changes have you observed in your own lifetime of deterioration of the environment? When did you become aware of it?
9. If our lifestyle is having the negative effects on us and the world that the filmstrip and tape suggest, why do we continue to live as we do?
10. How can we achieve a balance between our country's economic needs and its environmental well-being?
11. What conveniences would you be willing to give up if you thought that these sacrifices would lead to a "better way of life?"
12. Can technology make it possible for us to enjoy the benefits of our current lifestyle without suffering the consequences we are now experiencing?
13. Where do we obtain the energy for our mechanized existence?
How long will we be able to provide all of the energy necessary to meet our demands? Is it possible that we will someday be forced by necessity to cut back on our standard of living?
14. How is lifestyle affected by population growth?
15. How widespread is the understanding or acceptance of the point of view expressed in "A Better Way To Live"?
If we become convinced of the necessity and desirability of changing to a "better way of life," how can this change be effected?
16. Is there a backlash from business and industry as a result of efforts by environmentalists to improve our environment?
17. What is the reaction among developing nations to suggestions that consumption and standards of living must be controlled in order to protect the environment?
How do the less privileged people in our own country feel about revising our definition of the "good life" which presently includes a high standard of living?
18. How has advertising contributed to our present lifestyle?
What examples can we find in the newspapers, magazines, radio, and TV of attempts to seduce consumers to practice habits which lead to early obsolescence and overconsumption and their attendant waste and pollution?
19. What evidence have we seen since Earth Day 1970 of a gradual modification of our lifestyle toward less waste and consumption?
How well have steps toward recycling, decreased dependence on the automobile, and "saving-a-watt," caught on? What are some of the problems standing in the way of a more rapid and widespread change in this direction?

20. The filmstrip suggests in several places that things are interdependent, that "everything is connected to everything else." What are some examples of these relationships?
21. The filmstrip also states that humans, plants, and animals pay for a jet's free lunch. What does that mean?
22. Through the centuries, man has been battling nature and has been proud of every success. Can man achieve a "better way of life" if he continually bests nature?
23. What are the life-supporting substances? What evidence is there that each of them is threatened?
24. What evidence can be offered to support the statement that, "often the more efficiently engineers, business managers, and research scientists perform their jobs, the more the environment is harmed?"
25. If it ever became necessary to accept some compromises in our present lifestyle or standard of living, who will decide what is to be discarded and what is to be retained? Who should?

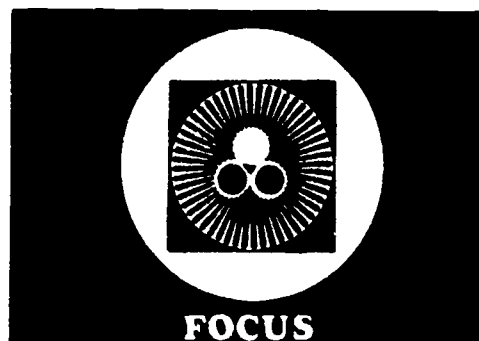
TEXT OF THE SCRIPT

The following text of the filmstrip is provided to assist teachers who wish to read it before class while preparing their lesson presentation.

Sound

Frame

- (1) *Focus frame.* (Focus projector, then advance to next frame.)



- (2) *Dark frame.* (Leave projector as is, in running mode, with light on. Because slide is opaque, screen will appear dark. Start audio tape. The first sound that you will hear, marking the start of the presentation, will be an audible advance signal in the sound of a beep. At this sound, advance the picture to the next frame. Hold until the next signal is heard superimposed on the sound track. Repeat advance at every successive signal.)



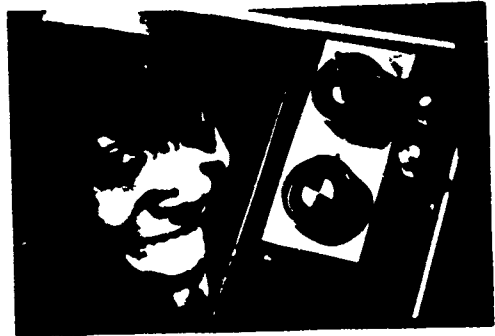
- (3) (Sound of air travel TV commercial)



- (4) Is there any doubt as to what the good life is all about?



- (5) Millions of dollars a week are spent to fill our eyes and ears with the message ...



- (6) ...and whether we want it or not, the message sinks in...



- (7) Happiness is all around us, waiting to be bought on endless shelves — in endless showrooms. The only catch is, it's not free... and it doesn't last.



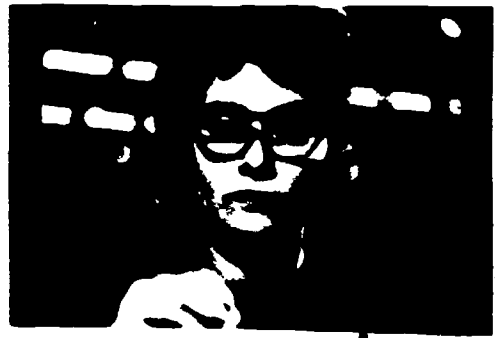
- (8) We have to buy some every day. To do this, we work, and borrow, and pay later.



- (9) Often work is painfully boring, noisy, uncomfortable, and tiring...



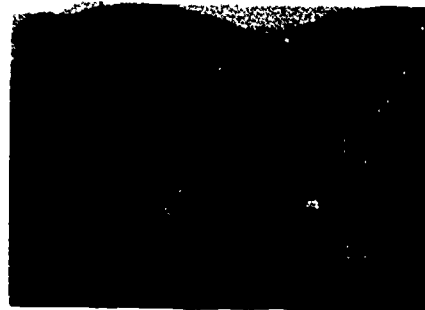
- (10) ...and both men and women spend most of their time doing these things to pay for the things that bring them happiness... in whatever time they have left.



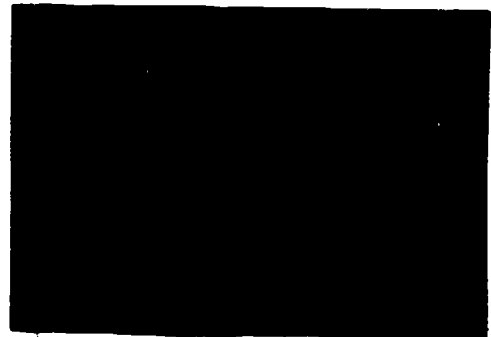
- (11) Does it really make a lot of sense?
Is there a better way to live?



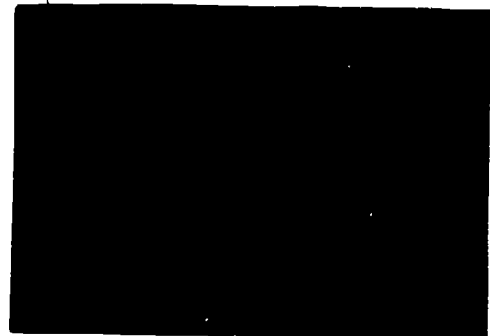
- (12) *(First title)*
(Music continues through titles.
Advance titles at signal tones during music.)



- (13) *(Second title)*



- (14) *(Third title)*



- (15) We have always accepted the truth of the saying: "Americans have the highest standard of living in the world."



- (16) The measure usually used is to count all of the indoor plumbing, bathtubs, butter, cars, TV sets, miles of paved road, chickens, and all other things countable. This is then divided by the population and a "per capita" figure is born.



- (17) "Per capita" means every one of us... our own share of the world. But are bathtubs and cars the only things worth counting?



- (18) How about the man in a 'so-called "poorer" country who walks home from work in the middle of the day for a 3 hour lunch and nap? Should we think about that as part of a standard of living?



- (19) Even primitive peoples who own few manufactured goods may have natural benefits we don't know about.



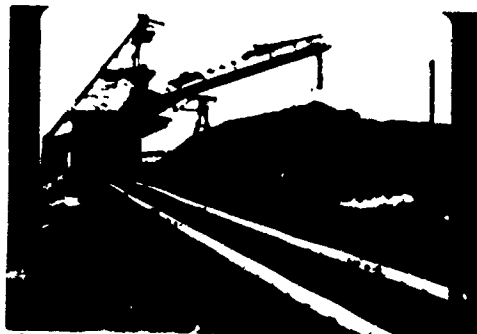
(20) If we consider fishing and hunting such good sport, why do we feel sorry for those who get some of their daily food this way?



(21) The fact is, counting all of our worldly goods without counting the price we have had to pay for them hides an important part of the truth.



(22) Everything that gets its power from burning fuel uses a lot of free air.



(23) What it returns to the air is smoke full of poisonous fumes. So much of these pollutants are put into the air in cities and their suburbs that weather reports now include "air condition."



(24) Paper mills and chemical factories take hundreds of millions of gallons of free water from rivers for their processes. What they put back is unfit for use by anyone or anything else.



(25) Cities dump their sewage and garbage into free coastal waters and rivers...



(26) Jets swallow billions of cubic feet of free air every minute of the day and night... everybody taking part, it seems, in the endless free lunch supplied by nature.



(27) Actually, none of nature's gifts are free... in the sense that air and water and soil exist as they are, without effort.



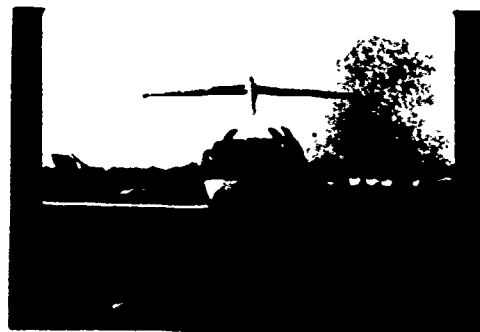
(28) Green plants put the oxygen in the air that we, and all animal life need. They use nutrients in the soil, water, and the sun's energy to do this. Animal life, in turn, provides much of the food needed by plant life.



(29) This dependence of each on the other... endlessly supplying each other, has taken hundreds of millions of years to perfect... and man, as a living creature, is very much a part of it. Machines are not.



(30) The oxygen that giant jets burn up in such quantities was put into the air by countless numbers of green plants.



(31) The burden of replacing the oxygen, nourishing the plants which produce it, and purifying the air and water falls on the other living things. And it is they, and we, who pay for the jet's free lunch.



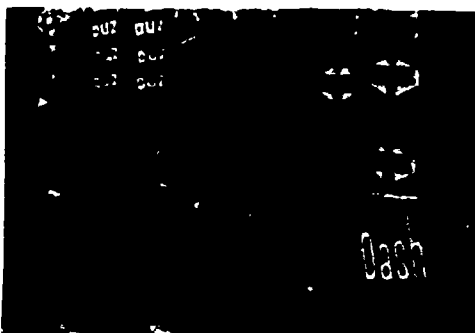
(32) This is true of all machines. Some, such as automobiles, airplanes, trucks, and boats are much more damaging than those which run on electric power...



(33) ...just as a chemical factory is more damaging than a clothing factory, or detergents more damaging than soaps.



(34) That's one of the main reasons for our serious pollution problem... not only are we using so much more of everything, we're using new, highly damaging things in place of old, less damaging ones.



- (35) Every year a smaller percentage of clothing is made of natural materials such as cotton and wool, and a greater percentage made from artificial fibers such as Acrilan, Dacron, and Nylon.



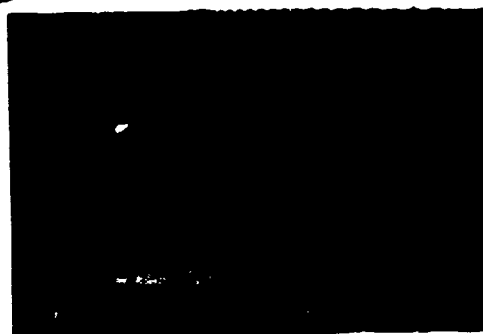
- (36) To manufacture these, and other synthetic threads, an ever-growing number of chemical factories are being built or enlarged. These use, among other things, great quantities of water and mercury in their processes.



- (37) Instead of using trains, which are less damaging to the environment, we use automobiles and planes and buses.



- (38) For freight, truck traffic has grown many times more rapidly than rail traffic.



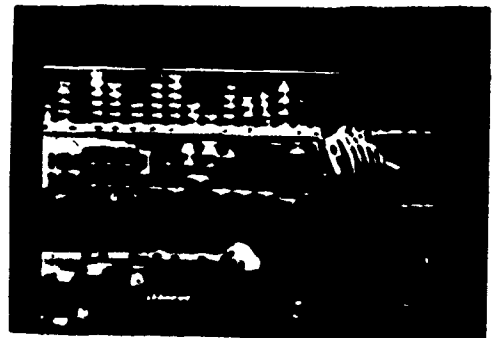
- (39) In construction, the use of aluminum, plastics, and concrete, all highly damaging to the environment in their manufacture, are replacing less damaging wood and steel.



(40) In farming, chemical fertilizers which are dangerous when over-used have replaced natural fertilizers.



(41) And the returnable deposit bottle has become a thing of the past... replaced by plastics, paper, throwaway bottles and cans... all of which are accumulating in large numbers in the garbage dumps of our land and at the bottom of the oceans.



(42) But still, the "sell" goes on. Does it matter to the people who try to manipulate our feelings, who keep pushing us to consume more and more, that their most successful products are all failures in the environment?



(43) If we damage a lake, or a prairie, or a part of the ocean, we kill some part of our life-support system. It took millions of years to build that system and any damage done to it could take almost as long to repair... which, in our scale of time, means forever.



(44) If we damage a city by neglecting its public services, it will begin to destroy itself, with far-reaching environmental effect.



(45) But business managers and engineers aren't trained to think in terms of endless cycles of cause and effect. Nature, to them, is slow, imperfect, and in constant need of improvement.



(46) Chickens can be made to grow faster... lay more eggs...



(47) Cattle can be fattened quicker and cheaper on feedlots rather than on grasslands...



(48) More bushels of corn can be grown per acre...



(49) Coal can be mined more efficiently by just stripping away all of the land over it, creating instant wastelands.



(50) Inefficient rivers can be dammed to make efficient irrigation systems...



(51) But chickens and corn and farmlands aren't machines. Today machine-like methods and chemicals do get more productive results... more corn, more meat, more of everything.



(52) Tomorrow we may pay a heavy price in pollution for it, as excess chemical fertilizers, concentrations of animal wastes, and lowering water tables destroy our inland waters and topsoils.



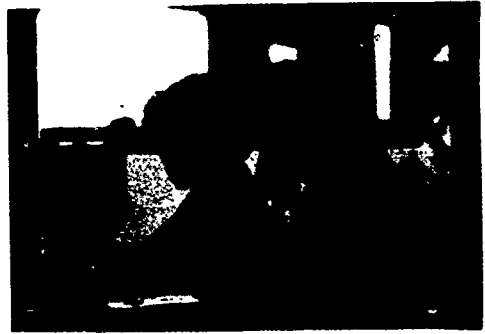
(53) In the end, we shall have to depend on ourselves. Life can be enjoyable without things that are destructive to our environment. It's our duty to ourselves, and to all living things, to know which they are... and to reject them.



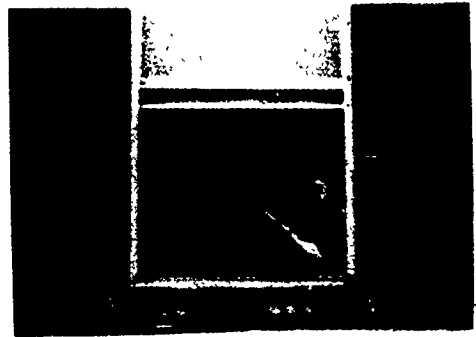
(54) A high standard of living should mean more than a list of all the things that we own. It should mean a special quality of life... work that we enjoy, in pleasant surroundings... freedom from financial pressure... and time for leisure...



(55) Time to spend enjoying each other...



(56) Doing the special things we like...
Living in the real world.



(57) *No text*



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